

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently Amended) One or more computer-readable storage media having stored thereon a set of computer-executable instructions to perform a method for generating data, the method comprising:

generating a plurality of collections of items of data each time the set of computer-executable instructions are executed, wherein each of the collections comprise contents and a sequence, and wherein the contents of each of the collections are identical and the sequence of each of the collections are identical;

accepting, as a first input to a deterministic data generation module, at least one of: (a) data sets and (b) data elements from which first synthetic data is generated and output by the deterministic data generation module, said first synthetic data having a sequence;

determining a position of at least one of the items of data in the first synthetic data;

determining a first seed based upon the position, wherein the first seed is used to regenerate the at least one of the items of data;

receiving the first seed as a second input to a deterministic data generation module, the first seed configured to regenerate the at least one of the items of data at a first numerical position in the sequence of the first synthetic data, wherein the first seed is within a first range allowed by a first parameter of the data generation module, wherein the first parameter and the first seed are configured to cause the data generation module to generate the first synthetic data, wherein the first synthetic data is repeatable, and wherein the data generation module outputs a first random number using the first seed;

determining a second seed as a third input to the data generation module and corresponding to a second numerical position in a sequence of second synthetic data, wherein the second seed is within a second range allowed by a second parameter of the data generation module, wherein the second range is different than the first range, wherein the second parameter and the second seed are configured to cause the data generation module to generate and output

the second synthetic data, wherein the first and second synthetic data are different, and wherein inputting the second seed into the data generator will output the second numerical position;  
inputting the second seed; and  
receiving a second random number associated with the second numerical position.

2. (Previously Presented) The one or more computer-readable storage media as recited in claim 1, wherein the computer-executable instructions comprise a computing application.
3. (Previously Presented) The one or more computer-readable storage media as recited in claim 2, wherein the computing application comprises a linear congruential generation function.
4. (Canceled)
5. (Previously Presented) The one or more computer-readable storage media in claim 1, wherein the computer-executable instructions operate to generate data in a serial fashion.
6. (Previously Presented) The one or more computer-readable storage media as recited in claim 1, wherein the computer-executable instructions operate to generate data in a parallel fashion.
7. (Previously Presented) The one or more computer-readable storage media as recited in claim 1, wherein the method is performed in a database environment.
8. (Previously Presented) The one or more computer-readable storage media as recited in claim 1, wherein the first input comprises any of a range of letters, a range of numbers, a range of strings, a range of data sets, letters, numbers, strings, and data sets.
9. (Currently Amended) The one or more computer-readable storage media as recited in claim 1, wherein the method further comprises:

using a communication means to communicate the first and second synthetic data to cooperating data environments.

10. (Currently Amended) The one or more computer-readable storage media as recited in claim 1, wherein the first and second synthetic data is data for use in benchmarking activities having a predefined data schema definition.

11. (Currently Amended) A computer-implemented method for generating data comprising: providing by at least one computer processor a deterministic data generation module stored on at least one medium, the deterministic data generation module accepting inputs for processing to generate a plurality of data sets, each data set having synthesized data wherein within the data set each data element has a sequence number, and each data set is organized such that the data is positioned from lowest sequence number to highest sequence number in a sequential fashion, and wherein the synthesized data of each data set differs by using different seeds and parameters to generate the plurality of data sets;

providing by the at least one computer processor each of the seeds as input to the deterministic data generation module, each of the seeds acting to position the deterministic data generation module at different positions such that different data is regenerated and has a different, to regenerate data having a predefined sequence number, wherein the seed value of each seed is derived from the predefined sequence number, and wherein the sequence number represents a starting point from which the synthetic data is used as input to a process whose performance is to be evaluated, wherein each of the seeds is within a range allowed by at least one parameter of the data generation module, wherein the at least one parameter is configured to cause the data generation module to generate the synthetic data which is repeatable; and schematizing the synthesized data according to a predefined data schema definition.

12. (Previously Presented) The computer-implemented method as recited in claim 11, further comprising communicating the synthesized data to cooperating data environments.

13. (Previously Presented) The computer-implemented method as recited in claim 11, further comprising changing the value of each of the seeds.

14. (Previously Presented) The computer-implemented method as recited in claim 11, processing the synthesized data by cooperating environments as part of a benchmarking study.

15. (Previously Presented) The computer-implemented method as recited in claim 11, further comprising schematizing the synthesized data according to a predefined data schema definition.

16.-19. (Canceled)

20. (Currently Amended) A method to generate repeatable synthesized data comprising:  
executing by at least one computer processor a deterministic data generation function to generate a plurality of data sets corresponding to sequential numbers, the numbers associated with a data element of each data set, wherein each data element and associated number are different in each data set, wherein the plurality of data sets are generated by different seeds and parameters;

setting by the at least one computer processor one of the seeds of a corresponding data set to act as input for the deterministic data generation function by positioning the deterministic data generation function at different positions such that the input drives the deterministic data generation function such that different data is regenerated and corresponds to a different, to regenerate data corresponding to a particular sequential number, wherein one of the seeds seed is within a range allowed by at least one parameter of the data generation function, wherein the at least one parameter is configured to cause the data generation function to generate the synthetic data which is repeatable and different for each data set, wherein the seed is set for each discrete data element that may be regenerated; and

testing performance of a system by providing said data set as input to said system and measuring behavior of said system using said data set.

21. (Previously Presented) A method for generating data, comprising:

determining by at least one computer processor a random data output of a random data generator, wherein the output comprises a repeatable sequence of first set of random numbers, wherein each of the random numbers of the first set comprises a numerical position;

determining by the at least one computer processor a first seed value corresponding to a first numerical position of the first set of random numbers, wherein inputting the first seed value and a parameter into the random data generator will output the first numerical position;

inputting the first seed value, wherein the first seed value is within a first range;

receiving a first random number associated with the first numerical position;

determining a second seed value corresponding to a second numerical position of the random sequence of values, wherein inputting the second seed value into the random data generator will output the second numerical position, wherein the second seed value is within a second range, wherein the first and second seed values are different, and wherein the first range is different from the second range;

inputting the second seed value and a second parameter, wherein the first and second parameters are different; and

receiving a second set of random numbers associated with the first numerical position.

22. (Canceled)